Nikolaos Efremidis – Curriculum Vitae

Department of Mathematics & Applied Mathematics
University of Crete
Voutes Campus, 70013 Heraklion, Crete, Greece
&
Institute of Applied and Computational Mathematics
Foundation for Research and Technology – Hellas (FORTH)

☎ +30-2810-393731
FAX +30-2810-393701
✉ nefrem@uoc.gr
www.tem.uoc.gr/~nefrem

Education

1997 - 2001	Ph.D. in electromagnetic applications, electro-optics, and electronic materials School of Electrical and Computer Engineering, National Technical Univ. of Athens, Greece Thesis: "Coupled complex Ginzburg-Landau equations in optical communications"
1992 - 1996	B.S., Department of Physics, University of Crete, Greece Thesis: "Long superconductive Josephson junctions with lateral idle region".

Employment

2017 -	Collaborating Researcher Institute of Applied and Computational Mathematics, **Foundation for Research and Technology** Greece
2013 -	Associate Professor Department of Mathematics & Applied Mathematics, **University of Crete** Heraklion, Greece
April - July 2016	Visiting Professor Department of Information Engineering, **Università degli Studi di Brescia** Brescia, Italy
2011 - 2013	Tenured Assistant Professor Department of Applied Mathematics, **University of Crete** Heraklion, Greece
October 2012	Visiting Professor Abbe School of Photonics, **Friedrich-Schiller-Universität** Jena, Germany
2007 - 2011	Assistant Professor Department of Applied Mathematics, **University of Crete** Heraklion, Greece
2006 - 2007	Visiting Associate Professor Department of Applied Mathematics, **University of Crete** Heraklion, Greece
2005 - 2006	Postdoctoral fellow School of Electrical and Computer Engineering, **National Technical University of Athens** Athens, Greece
2002 - 2004	Postdoctoral fellow College of Optics and Photonics, **University of Central Florida** Orlando, Florida, USA
2001 - 2002	Postdoctoral fellow Department of Electrical and Computer Engineering, **Lehigh University** Bethlehem, Pennsylvania, USA

Research interests

Linear and nonlinear waves in partial differential equations and differential difference equations with applications in optics, lasers, and Bose-Einstein condensates, solitons, nonlinear Floquet theory, dynamical systems and bifurcations, perturbations and asymptotic methods, mathematical modeling and simulations.

Society affiliations

- Optical Society of America: senior member.

Service

- Reviewer for Nature Communications, Scientific Reports, Physical Review Letters, Physical Review X, Physical Review A, Physical Review E, Photonics Research, Optics Letters, Optics Express, Journal of the Optical Society of America B, Applied Physics Letters, IEEE Journal of Quantum Electronics, IEEE Journal of Selected Topics in Quantum Electronics, IEEE Journal of Lightwave Technology, Physics Letters A, Optics Communications, Applied Physics B, European Physical Journal B, Journal of Optics B: Quantum and Semiclassical Optics, Chaos, Applied Sciences, Springer Series on Wave Phenomena, Chinese Optics Letters, and Revista Mexicana de Física, Journal of Quantitative Spectroscopy and Radiative Transfer.
- Member of the CLEO conference committee *QELS 5: Nonlinear Optics and Novel Phenomena* (2014 and 2015).
- Member of the organizing committee of the mini-symposium "Novel Phenomena in Linear and Nonlinear Optical Systems" that is part of the "International Conference on Applied Mathematics", Heraclion, Crete, Greece, 16-20 September, 2013.
- Member of the organizing committee of the Workshop "Nonlinear Schrödinger Equations and their Applications", Heraclion, Crete, Greece, 20-24 May, 2013.
- Member of the local organizing committee of the 21^{th} Conference - Summer School *Nonlinear science and complexity*, Athens, Greece, July 21 - August 2, 2008.
- Member of the organizing committee of the 4^{th} *working conference on Optical Network design and modeling*, Athens, Greece, 7-8 February 2000.
- Member of the local organizing committee of the 11^{th} *Panhellenic Conference/Summer School in Complexity and Chaotic Dynamics of Nonlinear Systems*, Lebadia, Greece, 13-15 July 1998.

Publications

- An updated list of my publications can be found at www.tem.uoc.gr/~nefrem/research.html.

Publications summary

Book chapters:	5
Papers in refereed journals:	92
Conference contributions:	103
Invited presentations:	22

Citations

	Google Scholar	Web of Science
Sum of the times cited	6238	4549
Excluding self-citations		4297
h-index	31	28
Citations per item		52.9
Last Update	May 17, 2019	May 17, 2019

Book chapters

[B5] Yi Hu, Georgios A. Siviloglou, Peng Zhang, Nikolaos K. Efremidis, Demetrios N. Christodoulides, and Zhigang Chen, *Self-accelerating Airy beams: Generation, Control, and Applications*, *Springer Series in Optical Sciences: Nonlinear Photonics and Novel Optical Phenomena* (vol. 170) edited by Zhigang Chen and Roberto Morandotti, p. 1, (Springer, Berlin, 2012).

[B4] Nikolaos K. Efremidis, Jason W. Fleischer, Guy Bartal, Oren Cohen, Hrvoje Buljan, Demetrios N. Christodoulides, and Mordechai Segev, "Introduction to solitons in photonic lattices", *Springer Series in Optical Sciences: Nonlinearities of Periodic Structures and Metamaterials* (vol. 150) edited by Cornelia Denz, Sergej Flach, and Yuri S. Kivhsar, p. 73, (Springer, Berlin, 2009).

[B3] Nikolaos K. Efremidis and Demetrios N. Christodoulides, "Discrete Ginzburg-Landau Solitons", in *Lecture notes in Physics: Dissipative Solitons* (vol. 661) edited by N. N. Akhmediev and A. Ankiewicz, p. 309, (Springer, Berlin, 2005).

[B2] Kyriakos Hizanidis, Nikos Efremidis, Alexandros Stavdas, Boris A. Malomed, Hector Nistazakis, and Dimitri J. Frantzeskakis, "TDM and WDM with chirped solitons in optical transmission systems with distributed amplification," in *Solid State Science and Technology Library, Volume 6: Massive TDM and WDM Soliton Transmission Systems* ed. Akira Hasegawa, p. 139 (Kluver, New York, 2000).

[B1] Kyriakos Hizanidis, Nikos Efremidis, Boris A. Malomed, Hector Nistazakis, and Dimitri J. Frantzeskakis, "Variational approach to transmission in DM long optical links," *New Trends in Optical Soliton Transmission Systems*, vol. 5, ed. Akira Hasegawa, p. 117 (Kluver, New York, 1998).

Refereed journals

[J92] A. Roussou, J. Smyrnakis, M. Magiropoulos, N. K. Efremidis, W. von Klitzing, and G. M. Kavoulakis, *Fragility of the Laughlin state in a an anharmonically-trapped Bose-Einstein condensate*, Phys. Rev. A **99**, 053613 (2019).

[J91] N. K. Efremidis, Z. Chen, M. Segev, and D. N. Christodoulides, *Airy beams and accelerating waves: An overview of recent advances*, Optica **6**, 686 (2019).

[J90] D. Song, D. Leykam, J. Su, X. Liu, L. Tang, S. Liu, J. Zhao, N. K. Efremidis, J. Xu, and Z. Chen1, *Valley Vortex States and Degeneracy Lifting via Photonic Higher-Band Excitation*, Phys. Rev. Lett. **122**, 123903 (2019).

[J89] R.-S. Penciu, Y. Qiu, M. Goutsoulas, X. Sun, Y. Hu, J. Xu, Z. Chen, and N. K. Efremidis, *Observation of micro-scale nonparaxial optical bottle beams*, Opt. Lett. **43**, 3878 (2018).

[J88] M. Goutsoulas, R.-S. Penciu, and N. K. Efremidis, *Independent amplitude and trajectory/beam-width control of non-paraxial beams*, Opt. Express **26**, 18969 (2018).

[J87] M. Goutsoulas and N. K. Efremidis *Precise amplitude, trajectory, and beam-width control of accelerating and abruptly autofocusing beams*, Phys. Rev. A **97**, 063831 (2018).

[J86] A. Roussou, J. Smyrnakis, M. Magiropoulos, Nikolaos K. Efremidis, G. M. Kavoulakis, P. Sandin, M. Ögren, and M. Gulliksson, *Excitation spectrum of a mixture of two Bose gases confined in a ring potential with interaction asymmetry*, New J. Phys. **20**, 045006 (2018).

[J85] N. K. Efremidis, *Spatiotemporal diffraction-free pulsed beams in free-space of the Airy and Bessel type*, Opt. Lett. **42**, 5038 (2017).

[J84] M. Goutsoulas, V. Paltoglou, and N. K. Efremidis, *Cross-phase modulation mediated pulse control with Airy pulses in optical fibers*, J. Opt. **19**, 115505 (2017).

[J83] N. K. Efremidis, N. S. Nye, and D. N. Christodoulides, *Exact bidirectional X-wave solutions in fiber Bragg gratings*, Phys. Rev. A **96**, 043820 (2017).

[J82] A. Roussou, J. Smyrnakis, M. Magiropoulos, N. K. Efremidis, and G. M. Kavoulakis, *Rotating Bose-Einstein condensates with a finite number of atoms confined in a ring potential: Spontaneous symmetry breaking, beyond the mean-field approximation*, Phys. Rev. A **95**, 033606 (2017).

[J81] V. Paltoglou and N. K. Efremidis, *Parity breaking in a nonlinear double-slit configuration*, J. Opt. Soc. Am. B **34**, 257 (2017).

[J80] N. K. Efremidis and M. Mparkas, *Nonlinear imaging in photonic lattices*, Opt. Lett. **42**, 147 (2017).

[J79] R.-S. Penciu, K. G. Makris, and N. K. Efremidis, *Nonparaxial abruptly autofocusing beams*, Opt. Lett. **41**, 1042 (2016).

[J78] Z. Chen, J. Zhao, I. D. Chremmos, D. Song, D. N. Christodoulides, and N. K. Efremidis, *Spiraling particles by fine-shaped dynamical singular beams*, Opt. Photonics News **26**, 44 (December 2015).
Optics in 2015: Special issue of Optics & Photonics News that highlights the most exciting peer-reviewed optics research to have emerged over the past 12 months.

[J77] V. Paltoglou and N. K. Efremidis, *Modifying the optical path in a nonlinear double-slit experiment*, Opt. Lett. **40**, 5208 (2015).

[J76] Z. Wu, E. Zaremba, J. Smyrnakis, M. Magiropoulos, N. K. Efremidis, and G. M. Kavoulakis, *Mean-field yrast spectrum and persistent currents in a two-component Bose gas with interaction asymmetry*, Phys. Rev. A **92**, 033630 (2015).

[J75] J. Zhao, I. D. Chremmos, D. Song, P. Zhang, D. N. Christodoulides, N. K. Efremidis, and Z. Chen, *Curved singular beams for three-dimensional particle manipulation*, Sci. Rep. **5**, 12086 (2015).

[J74] D. Song, S. Liu, V. Paltoglou, D. Gallardo, L. Tang, J. Zhao, J. Xu, N. K. Efremidis, and Z. Chen *Controlled generation ofpseudospin-mediated vortices in photonic graphene*, *2D Mater.* **40**, 034007 (2015).
Special issue on artificial graphene.

[J73] J. Zhao, I. D. Chremmos, Ze Zhang, Yi Hu, D. Song, P. Zhang, N. K. Efremidis, and Z. Chen, *Specially shaped Bessel-like self-accelerating beams along predesigned trajectories*, Sci. Bull. **60**, 1157 (2015).

[J72] R.-S. Penciu, V. Paltoglou, and N. K. Efremidis, *Closed-form expressions for nonparaxial accelerating beams with pre-engineered trajectories*, Opt. Lett. **40**, 1444 (2015).

[J71] V. Paltoglou, Z. Chen, and N. K. Efremidis, *Composite multi-vortex diffraction-free beams and van Hove singularities in honeycomb lattices*, Opt. Lett. **40**, 1037 (2015).

[J70] D. Song, V. Paltoglou, S. Liu, Yi Zhu, D. Gallardo, L. Tang, J. Xu, M. Ablowitz, N. K. Efremidis, and Z. Chen, *Unveiling pseudospin and angular momentum in photonic graphene*, Nat. Commun. **6**, 6272 (2015).

[J69] A. Roussou, G. D. Tsibidis, J. Smyrnakis, M. Magiropoulos, N. K. Efremidis, A. D. Jackson, and G. M. Kavoulakis, *Hysteresis and metastability of Bose-Einstein condensed clouds of atoms confined in ring potentials*, Phys. Rev. A **91**, 023613 (2015).

[J68] J. Smyrnakis, M. Magiropoulos, N. K. Efremidis, and G. M. Kavoulakis, *Persistent currents in a two-component Bose-Einstein condensate confined in a ring potential*, J. Opt. B Quantum Semiclassical Opt. **47**, 215302 (2014).

[J67] V. Bolpasi, N. K. Efremidis, M. J. Morrissey, P. Condylis, D. Sahagun, M. Baker and W. von Klitzing, *An ultra-bright atom laser*, New J. Phys. **16**, 033036 (2014).
Comments about the above article appeared in

1. *New Scientist*, "Record-breaking atom laser to hunt quantum gravity", p. 17, 29 March 2014.
2. *phys.org*, "Scientists overcome fundamental atom laser limit to build brightest atom laser to date", 7 May 2014.

[J66] K. G. Makris, I. Kaminer, R. El-Ganainy, N. K. Efremidis, Z. Chen, M. Segev, and D. N. Christodoulides, *Accelerating diffraction-free beams in photonic lattices*, Opt. Lett. **39**, 2129 (2014).

[J65] N. K. Efremidis, *Accelerating beam propagation in refractive index potentials*, Phys. Rev. A **89**, 023841 (2014).

[J64] I. D. Chremmos and N. K. Efremidis, *Nonparaxial accelerating Bessel-like beams*, Phys. Rev. A **88**, 063816 (2013).

[J63] I. D. Chremmos, G. Fikioris, and N. K. Efremidis, *Accelerating and abruptly-focusing beam waves in the Fresnel zone of antenna arrays*, IEEE Trans. Antennas Propag. **61**, 5048 (2013).

[J62] N. K. Efremidis, V. Paltoglou, and W. von Klitzing, *Accelerating and abruptly autofocusing matter waves*, Phys. Rev. A **87**, 043637 (2013).

[J61] J. Zhao, P. Zhang, D. Deng, J. Liu, Y. Gao, I. D. Chremmos, N. K. Efremidis, D. N. Christodoulides, and Z. Chen, *Observation of self-accelerating Bessel-like optical beams along arbitrary trajectories*, Opt. Lett. **38**, 498 (2013).

[J60] M.S. Mills, G. A. Siviloglou, N. Efremidis, T. Graf, E. M. Wright, J.V. Moloney, and D.N. Christodoulides, *Localized waves with spherical harmonic symmetries*, Phys. Rev. A **86**, 063811 (2012).

[J59] I. D. Chremmos, Z. Chen, D. N. Christodoulides, and N. K. Efremidis, *Bessel-like optical beams with arbitrary trajectories*, Opt. Lett. **37**, 5003 (2012).

[J58] M. Bellec, P. Panagiotopoulos, D. G. Papazoglou, N. K. Efremidis, A. Couairon, and S. Tzortzakis, *Observation and optical tailoring of photonic lattice filaments*, Phys. Rev. Lett. **109**, 113905 (2012).
A comment about the above article appeared in *Physics* **5**, 104 (2012), section focus, "Taming light filaments", September 14, 2012.

[J57] I. D. Chremmos and N. K. Efremidis, *A note on perfect revivals in finite waveguide arrays*, Opt. Commun. **285**, 4364 (2012).

[J56] J. M. Zeuner, N. K. Efremidis, R. Keil, F. Dreisow, D. N. Christodoulides, A. Tünnermann, S. Nolte, and A. Szameit, *Optical analogue for massless Dirac particles and conical diffraction in one transverse dimension*, Phys. Rev. Lett. **109**, 023602 (2012).

[J55] I. D. Chremmos and N. K. Efremidis, *Band-specific phase engineering for curving and focusing light in waveguide arrays*, Phys. Rev. A **85**, 063830 (2012).

[J54] I. D. Chremmos and N. K. Efremidis, *Surface optical Bloch oscillations in semi-infinite waveguide arrays*, Opt. Lett. **37**, 1892 (2012).

[J53] N. K. Efremidis, D. G. Papazoglou, and S. Tzortzakis, *Linear and nonlinear waves in surface and wedge index potentials*, Opt. Lett. **37**, 1874 (2012).

[J52] I. D. Chremmos and N. K. Efremidis, *Reflection and refraction of an Airy beam at a dielectric interface*, J. Opt. Soc. Am. A **29**, 861 (2012).
This article was No 7 in the Journal of the Optical Society of America top downloads chart for June 2012.

[J51] N. K. Efremidis and I. D. Chremmos, *Caustic design in periodic lattices*, Opt. Lett. **37**, 1277 (2012).

[J50] I. D. Chremmos, Z. Chen, D. N. Christodoulides, and N. K. Efremidis, *Abruptly autofocusing and autodefocusing optical beams with arbitrary caustics*, Phys. Rev. A **85**, 023828 (2012).

[J49] I. Chremmos, P. Zhang, J. Prakash, N. K. Efremidis, D. N. Christodoulides, and Z. Chen, *Fourier-space generation of abruptly autofocusing beams and optical bottle beams*, Opt. Lett. **36**, 3675 (2011).

[J48] P. Zhang, N.K. Efremidis, A. Miller, P. Ni, and Z. Chen, *Reconfigurable 3D photonic lattices by optical induction for optical control of beam propagation*, *invited paper*, Appl. Phys. B **104**, 553 (2011).

[J47] J. G. Caputo, N. K. Efremidis, and C. Hang, *Fourier-mode dynamics for the nonlinear Schrödinger equation in one-dimensional bounded domains*, Phys. Rev. E **84**, 036601 (2011).

[J46] N. K. Efremidis, *Airy trajectory engineering in dynamic linear index potentials*, Opt. Lett. **36**, 3006 (2011).

[J45] P. Zhang, J. Prakash, Ze Zhang, M. S. Mills, N. K. Efremidis, D. N. Christodoulides, and Z. Chen, *Trapping and guiding microparticles with morphing autofocusing Airy beams*, Opt. Lett. **36**, 2883 (2011).
This article was selected for the October 3, 2011 issue of the *Virtual Journal for Biomedical Optics*.

[J44] I. Chremmos, N. K. Efremidis, and D. N. Christodoulides, *Pre-engineered abruptly autofocusing beams*, Opt. Lett. **36**, 1890 (2011).

[J43] P. Panagiotopoulos, A. Couairon, N. K. Efremidis, D. G. Papazoglou, and S. Tzortzakis, *Intense Dynamic Bullets in a periodic lattice*, Opt. Express **19**, 10057 (2011).

[J42] D. G. Papazoglou, N. K. Efremidis, D. N. Christodoulides, and S. Tzortzakis, *Observation of abruptly autofocusing waves*, Opt. Lett. **36**, 1842 (2011).
This article was No 2 in the Optics Letters top downloads chart for May 2011.

[J41] P. Panagiotopoulos, N.K. Efremidis, D. G. Papazoglou, A. Couairon, S. Tzortzakis, *Tailoring the filamentation of intense femtosecond laser pulses with periodic lattices*, Phys. Rev. A **82**, 061803(R) (2010).

[J40] N. K. Efremidis and D. N. Christodoulides, *Abruptly autofocusing waves*, Opt. Lett. **35**, 2045 (2010).
This article was No 6 in the Optics Letters top downloads chart for December 2010.

[J39] P. Zhang, N. K. Efremidis, A. Miller, Yi Hu, and Z. Chen, *Observation of coherent destruction of tunneling and unusual beam dynamics due to negative coupling in three-dimensional photonic lattices*, Opt. Lett. **35**, 3252 (2010).

[J38] N. K. Efremidis, P. Zhang, Z. Chen, D. N. Christodoulides, C. E. Rüter, and D. Kip, *Wave propagation in waveguide arrays with alternating positive and negative couplings*, Phys. Rev. A **81**, 053817 (2010).

[J37] N. K. Efremidis, G. A. Siviloglou, and D. N. Christodoulides, *Exact X-wave solutions of the hyperbolic nonlinear Schrödinger equation with a supporting potential*, Phys. Lett. A **373**, 4073 (2009).

[J36] N. K. Efremidis, *Bifurcations of nonlinear localized modes in disordered lattices*, Phys. Rev. A **79**, 063831 (2009).

[J35] N. K. Efremidis, *Two-dimensional disordered lattice solitons*, Opt. Lett. **34**, 596 (2009).

[J34] G. Karali, P. G. Kevrekidis, and N. K. Efremidis, *Nonlinear from Linear States in Two-Component Bose-Einstein Condensates*, J. Phys. A **42**, 045206 (2009).

[J33] K. Hizanidis, Y. Kominis, and N. K. Efremidis, *Interlaced linear-nonlinear optical waveguide arrays,* Opt. Express **16**, 18296 (2008).

[J32] N. K. Efremidis and K. Hizanidis, *Disordered lattice solitons,* Phys. Rev. Lett. **101**, 143903 (2008).

[J31] N. K. Efremidis, *Nonlocal lattice solitons in thermal media,* Phys. Rev. A **77**, 063824 (2008).

[J30] Y. Sivan, G. Fibich, N. K. Efremidis, and S. Bar-Ad, *Analytic theory of narrow lattice solitons,* Nonlinearity **21**, 509 (2008).

[J29] N. K. Efremidis, D. N. Christodoulides, and K. Hizanidis, *Two-dimensional discrete Ginzburg-Landau solitons,* Phys. Rev. A **76**, 043839 (2007).

[J28] N. K. Efremidis, K. Hizanidis, B. A. Malomed, and P. Di Trapani, *Three-dimensional vortex solitons in self-defocusing media,* Phys. Rev. Lett. **98**, 113901 (2007).

[J27] K. Hizanidis, S. Droulias, I. Tsopelas, N. K. Efremidis, and D. N. Christodoulides, *Localized modes in a circular array of coupled nonlinear optical waveguides,* Int. J. Bifurc. Chaos **16**, 1739 (2006).

[J26] N. K. Efremidis and K. Hizanidis, *Bandgap lattices: low index solitons and linear properties,* Opt. Express **13**, 10571 (2005).

[J25] J. W. Fleischer, G. Bartal, O. Cohen, T. Schwartz, O. Manela, B. Freeman, M. Segev, H. Buljan, and N. K. Efremidis, *Spatial photonics in nonlinear waveguide arrays,* Opt. Express **13**, 1780 (2005).

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[J23] N. K. Efremidis and D. N. Christodoulides, *Bloch oscillations in optical dissipative lattices,* Opt. Lett. **29**, 2485 (2004).

[J22] D. N. Christodoulides, N. K. Efremidis, P. Di Trapani, and B. A. Malomed, *Bessel X-waves in two and three-dimensional bidispersive optical systems,* Opt. Lett. **29**, 1446 (2004).

[J21] H. Buljan, O. Cohen, J. W. Fleischer, T. Schwartz, M. Segev, Z. H. Musslimani, N. K. Efremidis, and D. N. Christodoulides, *Random-phase solitons in nonlinear periodic lattices,* Phys. Rev. Lett. **92**, 223901 (2004).

[J20] K. Hizanidis, S. Droulias, I. Tsopelas, N. K. Efremidis, and D. N. Christodoulides, *Centrally coupled circular array of optical waveguides: the existence of stable steady state continuous waves and breathing modes,* Phys. Scr. **T107**, 13 (2004).

[J19] Jared Hudock, N. K. Efremidis, and D. N. Christodoulides, *Anisotropic diffraction and elliptic discrete solitons in two-dimensional waveguide arrays,* Opt. Lett. **29**, 268 (2004).

[J18] N. K. Efremidis, J. Hudock, D. N. Christodoulides, J. W. Fleischer, Oren Cohen, and M. Segev, *Two-dimensional optical lattice solitons,* Phys. Rev. Lett. **91**, 213906 (2003).
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[J17] H. Buljan, M. Segev, M. Soljaĉić, N. K. Efremidis, and D. N. Christodoulides, *White light solitons,* Opt. Lett. **28**, 1239 (2003).

[J16] N. K. Efremidis and D. N. Christodoulides, *Lattice solitons in Bose-Einstein condensates,* Phys. Rev. A **67**, 063608 (2003).

[J15] J. W. Fleischer, M. Segev, N. K. Efremidis, and D. N. Christodoulides, *Observation of two-dimensional discrete solitons in optically-induced nonlinear photonic lattices,* Nature **422**, 147 (2003).
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Comments about the first observation of two-dimensional discrete solitons appeared in:

1. *Physics Today*, column Physics Update, p. 9, April 2003 with title "Two-dimensional lattice solitons".
2. *Optics and Photonics News*, column Scatterings, p. 10, July 2003 with title "A first for solitons".

[J14] N. K. Efremidis and D. N. Christodoulides, *Discrete Ginzburg-Landau Solitons,* Phys. Rev. E **67**, 026606 (2003).

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[J12] J. W. Fleischer, N. K. Efremidis, T. Carmon, D. N. Christodoulides, and M. Segev, *Solitons in optically-induced nonlinear photonic lattices,* Opt. Photonics News **13**, 49 (December 2002).
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[J11] N. K. Efremidis, D. N. Christodoulides, S. Sears, J. W. Fleischer, and M. Segev, *Discrete Solitons in Photorefractive Optically-Induced Photonic Lattices,* Phys. Rev. E **66**, 046602 (2002).
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[J9] D. N. Christodoulides and N. K. Efremidis, *Discrete temporal solitons along a chain of nonlinear coupled microcavities embedded in photonic crystals,* Opt. Lett. **27**, 568 (2002).

[J8] H. E. Nistazakis, D. J. Frantzeskakis, J. Atai, B. A. Malomed, N. Efremidis, and K. Hizanidis, *Multichannel pulse dynamics in a stabilized Ginzburg-Landau system,* Phys. Rev. E **65**, 036605 (2002).

[J7] N. Efremidis and K. Hizanidis, *Complex-cubic Ginzburg-Landau equation-based model for erbium-doped fiber-amplifier-supported nonreturn-to-zero communications,* J. Opt. Soc. Am. B **19**, 63 (2002).

[J6] E. D. Eugenieva, N. Efremidis, and D. N. Christodoulides, *Design of switching junctions for two-dimensional discrete soliton networks,* Opt. Lett. **26**, 1978 (2001).

[J5] E. D. Eugenieva, N. K. Efremidis, and D. N. Christodoulides, *Navigating discrete solitons in two-dimensional nonlinear waveguide networks,* Opt. Lett. **12**, 57 (December 2001).
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[J4] N. Efremidis, K. Hizanidis, H. E. Nistazakis, D. J. Frantzeskakis, and B. A. Malomed, *Stabilization of dark solitons in the cubic Ginzburg-Landau equation,* Phys. Rev. E **62**, 7410 (2000).

[J3] N. Efremidis, K. Hizanidis, B. A. Malomed, H. Nistazakis, and D. J. Frantzeskakis, *Stable transmission of solitons in the region of normal dispersion,* J. Opt. Soc. Am. B **17**, 952 (2000).

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[J1] J.-G. Caputo, N. Efremidis, N. Flytzanis, N. Lazaridis, Y. Gaididei, I. Moulitsa, and E. Vavalis, *Static properties and waveguide modes of a wide lateral window Josephson junction,* Int. J. Mod. Phys. C **11**, 493 (2000).

Conference publications

[C103] Nikolaos K. Efremidis, *Precise control of Optical beams*, **Invited talk** in the Symposium in Honor of the 60th Birthday of Giorgos P. Tsironis, 20 – 22 June 2019, Cultural Center of Chania, Crete, Greece

[C102] Ze Zhang, Xinli Liang, Nikos Efremidis, and Zhigang Chen, *Demonstration of turbulence-resistant propagation of anti-diffracting optical beams beyond kilometer distances*, paper FTh4B.1, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, San Jose McEnery Convention Center, San Jose, CA, USA, 7 – 9 May 2019.

[C101] Nikolaos K. Efremidis, *Precise control of the amplitude, the beam-width, and the trajectory of optical beams*, **Invited talk** in Novel Concepts in nonlinear photonics, 10-15 February 2019, Ein-Gedi, Dead Sea.

[C100] Nikolaos K. Efremidis, *Nonlinear imaging in photonic lattices*, **Invited talk** in Emerging Trends in Nonlinear Optics, September 10-12, 2018, Lake Iseo, Brescia - Italy.

[C99] Nikolaos K. Efremidis, *Accelerating waves: Theory and applications*, **Invited talk** in COMPLEXITY IN NONLINEAR PHOTONICS at Fondazione A. Volta, Villa Grumello, Como, Italy, 25–29 September, 2017.

[C98] Nikolaos K. Efremidis and Mihalis Barkas, *Nonlinear imaging in photonic lattices*, *CLEO/EUROPE - EQEC 2015, Conference on lasers and electro-optics - European quantum electronics conference*, 25-29 June 2017, Munich, Germany.

[C97] Daohong Song, Nikos Efremidis, and Zhigang Chen, *Pseudospin-mediated topological phenomena in photonic graphene*, **invited talk** in *SPIE Nanoscience + Engineering*, 28 August - 1 September 2016, San Diego, California, USA.

[C96] Vassilis Paltoglou, Zhigang Chen, and Nikolaos K. Efremidis, *Composite multi-vortex diffraction-free beams and van Hove singularities in honeycomb lattices*, paper El-1.2 THU *CLEO/EUROPE - EQEC 2015, Conference on lasers and electro-optics - European quantum electronics conference*, 21-25 June 2015, Munich, Germany.

[C95] Raluca-Sorina Penciu, Vassilis Paltoglou and Nikolaos K. Efremidis, *Nonparaxial accelerating beams with pre-engineered trajectories*, paper El-1.5 THU *CLEO/EUROPE - EQEC 2015, Conference on lasers and electro-optics - European quantum electronics conference*, 21-25 June 2015, Munich, Germany.

[C94] A. Roussou, G. D. Tsibidis, J. Smyrnakis, M. Magiropoulos, N. K. Efremidis , A. D. Jackson, and G. M. Kavoulakis, *Hysteresis and metastability of Bose-Einstein condensed clouds of atoms confined in ring potentials*, POLATOM 2015, ESF Network Meeting, Conference June 22-24, 2015, School June 20-21, 2015, PHB, Bad Honnef, Germany.

[C93] Vassilis Paltoglou, Zhigang Chen, and Nikolaos K. Efremidis, *Composite multi-vortex diffraction-free beams and van Hove singularities in honeycomb lattices*, **invited talk** in the symposium on *Graphene Lattices: Phenomena and Analysis*, *The Ninth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory*, April 01-04, 2015 Georgia Center for Continuing Education, University of Georgia, Athens, GA, USA.

[C92] Nikolaos K. Efremidis, *Accelerating and abruptly autofocusing waves*, **invited talk** in the symposium on *Wave propagation in complex media*, *The Ninth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory*, April 01-04, 2015 Georgia Center for Continuing Education, University of Georgia, Athens, GA, USA.

[C91] Vassilis Paltoglou, Zhigang Chen, and Nikolaos K. Efremidis, *Composite multi-vortex diffraction-free beams and van Hove singularities in honeycomb lattices*, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference* 2015.

[C90] Sheng Liu, Daohong Song, Vassilis Paltoglou, Daniel Gallardo, Liqin Tang, Jianlin Zhao, Jingjun Xu, Nikolaos K. Efremidis and Zhigang Chen, *Asymmetric conical diffraction and generation of non-integer phase singularities in photonic graphene*, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference* 2015.

[C89] Wolf von Klitzing, Vasiliki Bolpasi, Nikolaos K Efremidis, Michael Morrissey, Paul Condylis, Mark Baker *Ultra-high Flux Atom Lasers*, *Latin America Optics and Photonics Conference*, paper LF1A.3, Paradisus Cancun Resort, Cancun, Mexico, 16-21 November 2014

[C88] Ioannis D. Chremmos, Juanying Zhao, Demetrios N. Christodoulides, Zhigang Chen, and Nikolaos K. Efremidis, *Diffraction-resisting vortex Bessel beams with arbitrary trajectories* paper NM4A.4, *Nonlinear Photonics*, Barcelona, 27-31 July 2014.

[C87] Nikolaos K. Efremidis, *Accelerating beam propagation in refractive index potentials*, paper NTu2A.6, *Nonlinear Photonics*, Barcelona, 27-31 July 2014.

[C86] Vassilis Paltoglou, Daohong Song, Jingjun Xu, Zhigang Chen, Nikolaos K. Efremidis, *Vortex generation in photonic graphene*, paper JTu3A.29, *Nonlinear Photonics*, Barcelona, 27-31 July 2014.

[C85] Daohong Song, Liqin Tang, Cibo Lou, Yi Zhu, Mark Ablowitz, Vassilis Paltoglou, Nikos Efremidis, Jingjun Xu, and Zhigang Chen, *Direct observation of "pseudospin"-mediated vortex generation in photonic graphene*, paper FM2D.2, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, San Jose Convention Center, San Jose, CA, USA, 8-13 June 2014.

[C84] Nikolaos K. Efremidis, *Accelerating beam propagation in refractive index potentials*, paper JW2A.108, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, San Jose Convention Center, San Jose, CA, USA, 8-13 June 2014.

[C83] Nikolaos K. Efremidis, and Ioannis D. Chremmos, *Nonparaxial Bessel-like beams following curved trajectories*, paper FM3D.8, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, San Jose Convention Center, San Jose, CA, USA, 8-13 June 2014.

[C82] Ioannis D. Chremmos, Juanying Zhao, Demetrios N. Christodoulides, Zhigang Chen, and Nikolaos K. Efremidis, *Diffraction-resisting Vortex Bessel beams with arbitrary trajectories*, paper FM3D.1, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, San Jose Convention Center, San Jose, CA, USA, 8-13 June 2014.

[C81] Nikolaos K. Efremidis, *Curving and focusing light waves*, **invited talk**, in the *International Conference on Applied Mathematics*, mini-symposium on *Novel Phenomena in Linear and Nonlinear Optical Systems*, 16-20 September 2013, Heraclion, Crete.

[C80] Juanying Zhao, Peng Zhang, Jingjiao Liu, Ioannis D. Chremmos, Dongmei Deng, Yuanmei Gao, Nikolaos K. Efremidis, Demetrios N. Christodoulides, and Zhigang Chen, *Trapping and guiding microparticles with self-accelerating vortex beams*, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, San Jose Convention Center, San Jose, CA, USA, 9-14 June 2013.

[C79] Juanying Zhao, Ioannis D. Chremmos, Peng Zhang, Jingjiao Liu, Dongmei Deng, Yuanmei Gao, Nikolaos K. Efremidis, Demetrios N. Christodoulides, and Zhigang Chen, *Self-accelerating Bessel-like beams along arbitrary trajectories*, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, San Jose Convention Center, San Jose, CA, USA, 9-14 June 2013.

[C78] Nikolaos K. Efremidis, *Dynamics of curved and accelerated waves*, **invited talk**, workshop on the *Nonlinear Schrödinger Equation: Theory and Applications*, 20-24 May 2013, Heraclion, Crete.

[C77] Nikolaos K. Efremidis, Ioannis D. Chremmos, Juanying Zhao, Zhigang Chen, and Demetrios N. Christodoulides, *Diffraction resisting zero-order Bessel-like and higher-order vortex Bessel-like beams with arbitrary trajectories*, *CLEO/EUROPE - IQEC 2013, 12-16 May, Munich, Germany*.

[C76] Ioannis D. Chremmos, Zhigang Chen, Demetrios N. Christodoulides, and Nikolaos K. Efremidis, "Advanced trajectory engineering of diffraction-resisting laser beams", *PHOTOPTICS 2013: International Conference on Photonics, Optics and Laser Technology*, Barcelona, Spain, 20-12 February 2013.

[C75] J. M. Zeuner, N. K. Efremidis, R. Keil, F. Dreisow, D. N. Christodoulides, A. Tünnermann, S. Nolte, and A. Szameit, "One-dimensional massless Dirac-particles in waveguide arrays with alternating coupling", *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, San Jose Convention Center, San Jose, CA, USA, 6-11 May 2012.

[C74] Peng Zhang, Jai Prakash, Ze Zhang, Yi Hu, Nikos Efremidis, V. Kajorndejnukul, Demetrios Christodoulides, Zhigang Chen, "Observation of auto-focusing radially symmetric Airy beams", paper QThS1, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, Baltimore, MD, 1-6 May 2011.

[C73] Nikolaos K. Efremidis, Demetrios Christodoulides, Ioannis Chremmos, Zhigang Chen, "Abruptly autofocusing waves", paper QThS1, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, Baltimore, MD, 1-6 May 2011.

[C72] Alexandra Miller, Peng Zhang, Yi Hu, Zhigang Chen, and Nikolaos K. Efremidis *Anomalous diffraction, negative refraction, and image transmission in optically induced three-dimensional photonic lattices*, *Frontiers in Optics 2010/Laser Science XXVI*, Rochester, New York, USA, October 24-28 2010.

[C71] Nikolaos K. Efremidis, Peng Zhang, Zhigang Chen, Demetrios N. Christodoulides, Christian E. Rüter, and Detlef Kip, *Wave propagation in waveguide arrays with alternating positive and negative couplings*, **invited talk** in *the Second International Workshop: Nonlinear Optics and Novel Phenomena*, part of *the Minisymposia of the Second International Conference: Nonlinear Waves-Theory and Applications*, Beijing, China, June 30-July 1, 2010.

[C70] Nikolaos K. Efremidis, P. Panagiotopoulos, D. G. Papazoglou, A. Couairon, and S. Tzortzakis, *Filamentation control*

of intense laser beams in optical lattices, **invited talk** in the *Second International Conference: Nonlinear Waves-Theory and Applications*, Beijing, China, June 26-29, 2010.

[C69] Nikolaos K. Efremidis, Peng Zhang, Zhigang Chen, Demetrios N. Christodoulides, Christian E. Rüter, and Detlef Kip, *Wave propagation in waveguide arrays with alternating positive and negative couplings*, paper NThB7, Nonlinear Photonics Topical Meeting and Tabletop Exhibit, Karlsruhe, Germany, June 21-24, 2010.

[C68] Peng Zhang, Nikolaos K. Efremidis, Alexandra Miller, Yi Hu, and Zhigang Chen, *Demonstration of coherent destruction of tunneling in tunable three-dimensional photonic lattices*, paper NME51, Nonlinear Photonics Topical Meeting and Tabletop Exhibit, Karlsruhe, Germany, June 21-24, 2010.

[C67] P. Panagiotopoulos, N.K. Efremidis, A. Couairon, D.G. Papazoglou, and S. Tzortzakis, *Stabilization of filament interactions in periodic lattices*, *Third International Symposium on Filamentation*, Agia Pelagia, Crete, Greece, May 31 - June 5, 2010.

[C66] P. Panagiotopoulos, N.K. Efremidis, D. G. Papazoglou, A. Couairon, and S. Tzortzakis, *Tailoring the filamentation of intense femtosecond laser pulses with periodic lattices*, *Third International Symposium on Filamentation*, Agia Pelagia, Crete, Greece, May 31 - June 5, 2010.

[C65] Arnaud Couairon, C.L. Arnold, A. Mysyrowicz, P.P. Kiran, S. Bagchi, S.R. Krishnan, G. Ravindra Kumar, M.B. Gaarde, D. Steingrube, E. Schultz, M. Kovacev, A. Lotti, D. Faccio, P. Di Trapani, P. Panagiotopoulos, N.K. Efremidis, D. Papazoglou, and S. Tzortzakis, *Filamentation without intensity clamping*, *Third International Symposium on Filamentation*, Agia Pelagia, Crete, Greece, May 31 - June 5, 2010.

[C64] G. A. Siviloglou, N. K. Efremidis, P. Polynkin, J. V. Moloney, and D. N. Christodoulides, "Optical linear bullets with hydrogen-like symmetries", paper QMA3, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, San Jose, California, May 16-21 2010.

[C63] K. Hizanidis, Y. Kominis, A. Papadopoulos, N. K. Efremidis, P. Papagiannis, N. Moshonas, I. Tsopelas and S. Droulias, "Ginzburg-Landau solitons in interlaced lattices", **invited talk** in NLGW III, Interface Between Theory and Experiments, Mexico 2009.

[C62] Nikolaos Efremidis, "Disordered lattice solitons", *CPNLW-09 Solitons in their Roaring Forties: Coherence and Persistence in Nonlinear Waves*, Nice, France, 6 - 9 January 2009.

[C61] Nikolaos K. Efremidis, Demetrios N. Christodoulides, Kyriakos Hizanidis, Yannis Kominis, Nikos Moshonas, and Panagiotis Papagiannis, "Two-dimensional discrete Ginzburg-Landau solitons", *Nonlinear Waves: Theory and Experiment*, Tashkent, Uzbekistan, 15 - 18 January 2008.

[C60] Kyriakos Hizanidis, Boris Malomed, Nikolaos K. Efremidis, Yannis Kominis, Panagiotis Papagiannis, and Nikos Moshonas, "Three-dimensional spatio-temporal vortex lattices", *Nonlinear Waves: Theory and Experiment*, Tashkent, Uzbekistan, 15 - 18 January 2008.

[C59] Y. Sivan, G. Fibich, S. Bar-Ad, and N.K. Efremidis, "Analytic theory of narrow lattice solitons", in *Nonlinear Photonics*, Quebec City, Quebec, Canada, September 2-6, 2007.

[C58] Yannis Kominis, Aristides Papadopoulos, Ilias Tsopelas, Sotiris Droulias, Nikos Efremidis, George Papazisimos, Kyriakos Hizanidis, "Surface Lattice Solitons: Analytical Solutions of a Kronig-Penney Model", in *Nonlinear Optics: Materials, Fundamentals and Applications Topical Meeting and Tabletop Exhibit*, Sheraton Keauhou Bay Resort & Spa Kona, Hawaii, July 30 - August 3, 2007.

[C57] N.K. Efremidis, "Optical lattice solitons", in the *20th International Conference/Summer School in Nonlinear Science and Complexity*, Patras, July 19-29 2007.

[C56] N. Efremidis, P. Papagiannis, N. Moshonas, Y. Kominis, K Hizanidis, and B. A. Malomed, "Dark light solitary vortices in defocusing media", in *SPIE Europe, Optics and Optoelectronics*, Prague, Czech Republic, 16-19 April 2007.

[C55] Y. Kominis, A. Papadopoulos, I. A. Tsopelas, S. Droulias, N. Efremidis, G. Papazisimos, and K. Hizanidis, "Surface lattice solitons: analytical solutions", in *SPIE Europe, Optics and Optoelectronics*, Prague, Czech Republic, 16-19 April 2007.

[C54] N. Moshonas, Y. Kominis, N. Efremidis, M. Manousakis, and K. Hizanidis, "Investigation of spatiotemporal optical beam reallocation", in *SPIE Europe, Optics and Optoelectronics*, Prague, Czech Republic, 16-19 April 2007.

[C53] I. Tsopelas, Y. Kominis, P. Papagiannis, N. Moshonas, L. Halastanis, N. Efremidis, and K. Hizanidis, "Dark soliton dynamics and interactions in dynamically photoinduced lattices", in *SPIE Europe, Optics and Optoelectronics*, Prague, Czech Republic, 16-19 April 2007.

[C52] Ilias Tsopelas, Yannis Kominis, Kyriakos Hizanidis, Nikolaos Efremidis, Sotirios Droulias, Lambros Halastanis, Georgios Papazisimos, Nikolaos Moshonas, and Panagiotis Papagiannis, "Soliton dynamics and interactions in dynamically photo-induced lattices", in *ROMOPTO 2006*, Cibiu, Romania, August 28-31, 2006.

[C51] Nikolaos K. Efremidis, Yannis Kominis, Nikos Moshonas, Panagiotis Papagiannis, Kyriakos Hizanidis, Boris A. Malomed, and Paulo Di Trapani, "Three dimensional spatio-temporal X-waves with vorticity in defocusing media", in *ROMOPTO 2006*, Cibiu, Romania, August 28-31, 2006.

[C50] Nikolaos K. Efremidis, "Nonlinear wave evolution in nonlinear periodic lattices," 18^{th} Summer School/Panhellenic

Conference in *Nonlinear Science and Complexity*, Volos, Greece, July 18-30, 2005.

[C49] Nikolaos K. Efremidis, "Nonlinear evolution in periodic lattices", *Nonlinear Dispersive Wave Phenomena*, Anogia, Crete, July 9-15, 2005.

[C48] Sotiris Droulias, Nikos Moshonas, Yannis Kominis, Kyriakos Hizanidis, Joachim Meier, Nikos Efremidis, and Demetrios Christodoulides, "H-Waves in Nonlinear AlGaAs Waveguide Arrays", paper QMI6, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, Baltimore, Maryland, May 22-27, 2005.

[C47] Yannis Kominis, Nikolaos Moshonas, Panagiotis Papagiannis, Sotiris Droulias, Nikolaos K. Efremidis, Kyriakos Hizanidis, and Demetrios N. Christodoulides "Spatiotemporal X Waves in Highly Nonlinear Optical Systems", paper JWB93, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, Baltimore, Maryland, May 22-27, 2005.

[C46] Guy Bartal, Jason W. Fleischer, Mordechai Segev, Jared Hudock, Nikolaos K. Efremidis, and Demetrios N. Christodoulides, "Observation of elliptical discrete solitons in 2D photonic lattices", *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, San Francisco, California, May 16-21, 2004.

[C45] Nikolaos K. Efremidis and Demetrios N. Christodoulides, "Matter wave lattice solitons", *SIAM Conference on Nonlinear Waves and Coherent Structures*, Orlando, Florida, October 2-4, 2004.

[C44] Demetrios Christodoulides, Nikolaos Efremidis, Jason Fleischer, and Mordechai Segev,"Discrete Optical Solitons in Waveguide Arrays and Photonic Lattices", *SIAM Conference on Nonlinear Waves and Coherent Structures*, Orlando, Florida, October 2-4, 2004.

[C43] Mordechai Segev, Jason W. Fleischer, Hrvoje Buljan, Oren Cohen, Guy Bartal, Ofer Manela, Tal Schwartz, Nikos Efremidis, and Demetri N. Christodoulides, "Solitons in 2D photonic lattices", *SIAM Conference on Nonlinear Waves and Coherent Structures*, Orlando, Florida, October 2-4, 2004.

[C42] Moti Segev, Oren Cohen, Hrvoje Buljan, Jason W. Fleischer, Tal Schwartz, Ziad Musslimani, Nikolaos K. Efremidis, and Demetrios N. Christodoulides, "Random-phase solitons in nonlinear periodic lattices", paper MB2, in *Nonlinear Optics: Materials, Fundamentals, and Applications*, Waikoloa, Hawaii, August 2-6 2004.

[C41] S. Droulias, K. Hizanidis, I. Tsopelas, N.K. Efremidis, and D.N. Christodoulides, "Coupled Circular Arrays of Optical Amplifiers", *International Conference and Summer School: Complexity in Science and Society and European Advanced Studies Conference V*, Patras & Ancient Olympia, Greece, 14-26 July 2004.

[C40] I. Tsopelas, K. Hizanidis, S. Droulias, N.K. Efremidis, and D.N. Christodoulides, "Analyzing the optical properties of a fully packed homogeneous nonlinear waveguide lattice", *International Conference and Summer School: Complexity in Science and Society and European Advanced Studies Conference V*, Patras & Ancient Olympia, Greece, 14-26 July 2004.

[C39] Mordechai Segev, Jason W. Fleischer, Oren Cohen, Hrvoje Buljan, Guy Bartal, Tal Schwartz, Ofer Manela, Nikolaos K. Efremidis, Jared Hudock, and Demetrios N. Christodoulides, "Solitons in nonlinear photonic lattices", paper JYuD3, **invited talk** in the *Lasers and Electro-Optics/International Quantum Electronics Conference*, San Francisco, California, May 16-21, 2004.

[C38] Nikolaos K. Efremidis, Jared Hudock, Demetrios N. Christodoulides, Jason W. Fleischer, Oren Cohen, and Mordechai Segev, "Two-dimensional optical discrete/lattice solitons", paper JTuD4, *Lasers and Electro-Optics/International Quantum Electronics Conference*, San Francisco, California, May 16-21, 2004.

[C37] Hrvoje Buljan, Oren Cohen, Jason W. Fleischer, Tal Schwartz, Mordechai Segev, Ziad H. Musslimani, Nikolaos K. Efremidis, and Demetrios N. Christodoulides, "Random-phase solitons in nonlinear periodic lattices", paper JTuF2, *Lasers and Electro-Optics/International Quantum Electronics Conference*, San Francisco, California, May 16-21, 2004.

[C36] Nikolaos K. Efremidis, Jared Hudock, and Demetrios N. Christodoulides "Bloch oscillations and solitons in Discrete Ginzburg-Landau lattices", paper TuC25, *Nonlinear Guided Waves and Their Applications*, Toronto, Canada, March 28-31, 2004.

[C35] Nikolaos K. Efremidis, Jared Hudock, Demetrios N. Christodoulides, Jason W. Fleischer, Oren Cohen, and Mordechai Segev, "Two-dimensional optical discrete/lattice solitons", paper MA8, *Nonlinear Guided Waves and Their Applications*, Toronto, Canada, March 28-31, 2004.

[C34] Jared Hudock, Nikos K. Efremidis, and Demetrios N. Christodoulides, "Diffraction management and elliptic discrete solitons in two-dimensional waveguide array lattices", paper TuC36, *Nonlinear Guided Waves and Their Applications*, Toronto, Canada, March 28-31, 2004.

[C33] K. Hizanidis, S. Droulias, I. Tsopelas, N. K. Efremidis, and D. N. Christodoulides, "Coupled circular arrays of optical amplifiers", paper TuC39, *Nonlinear Guided Waves and Their Applications*, Toronto, Canada, March 28-31, 2004.

[C32] Hrvoje Buljan, Oren Cohen, Jason W. Fleischer, Tal Schwartz, Mordechai Segev, Ziad H. Musslimani, Nikolaos K. Efremidis, and Demetrios N. Christodoulides, "Random-phase solitons in nonlinear periodic lattices", paper WB3, *Nonlinear Guided Waves and Their Applications*, Toronto, Canada, March 28-31, 2004.

[C31] Jason W. Fleischer, Mordechai Segev, Nikolaos K. Efremidis, and Demetrios N. Christodoulides, "Solitons in 2D

optically induced photonic lattices", **invited talk** in the 16^{th} annual meeting of the *IEEE Lasers & Electro-Optics Society*, Tuscon, Arizona, 26-30 October, 2003.

[C30] Oren Cohen, Hrvoje Buljan, Jason W. Fleischer, Mordechai Segev, Ziad H. Musslimani, Nikolaos K. Efremidis, and D.N. Christodoulides, "Random-phase solitons in nonlinear periodic lattices", postdeadline paper PD 1.5, 16^{th} Annual Meeting of the *IEEE Lasers & Electro-Optics Society*, Tucson, AZ, 26-30 October 2003

[C29] Demetrios N. Christodoulides, Nikolaos Efremidis, Jason W. Fleischer, and Mordechai Segev, "Discrete Solitons," **invited talk** in the *6^{th} Mediterranean Workshop and Topical Meeting: Novel Materials and Applications*, Cetraro Italy, June 8-13, 2003.

[C28] Nikolaos K. Efremidis, Jared Hudock, and Demetrios N. Christodoulides, "Discrete Ginzburg-Landau solitons in laser arrays", paper QMC6, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, Baltimore, Maryland, June 1-6, 2003.

[C27] Jason W. Fleischer, Mordechai Segev, Nikolaos K. Efremidis, and Demetrios N. Christodoulides, "Observation of two-dimensional discrete solitons in optically induced nonlinear photonic lattices", **invited talk**, paper QThK1, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, Baltimore, Maryland, June 1-6, 2003.

[C26] Jared Hudock, Nikos K. Efremidis, and Demetrios N. Christodoulides, "Diffraction management and elliptic discrete solitons in two-dimensional waveguide array lattices", paper QMC4, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, Baltimore, Maryland, June 1-6, 2003.

[C25] Hrvoje Buljan, Marin Soljacic, Nikos K. Efremidis, Demetrios N. Christodoulides, and Mordechai Segev, "White light solitons", paper QTuG24, *Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Conference*, Baltimore, Maryland, June 1-6, 2003.

[C24] Nikos K. Efremidis, Hared Hudock, Demetrios N. Christodoulides, Jason Fleischer, and Mordechai Segev, "Nonlinear waves in periodic lattices", **invited talk** in the *third IMACS international conference on nonlinear evolution equations and wave phenomena*, April 7-10, 2003.

[C23] Jason W. Fleischer, Mordechai Segev, Nikolaos K. Efremidis, and Demetrios N. Christodoulides, "Discrete solitons in nonlinear photonic lattices", **invited talk** in the *33^{rd} Winter Colloquium on the Physics of Quantum Electronics*, Snowbird, Utah, 2003.

[C22] Jason W. Fleischer, Mordechai Segev, Nikolaos K. Efremidis, and Demetrios N. Christodoulides, "Discrete solitons in nonlinear photonic lattices", **invited talk** in the *Symposium on Discrete Solitons*, Optical Society of America, 2003.

[C21] Mordechai Segev, Jason W. Fleischer, Demetrios N. Christodoulides, Nikolaos K. Efremidis, and T. Carmon "Discrete solitons in optically induced photonic lattices", **invited talk** in the *European Conference on Lasers and Electro-optics*, Munich, Germany, 2003.

[C20] Nikos K. Efremidis, Jared Hudock, and Demetrios N. Christodoulides, "Discrete solitons in nonlinear zigzag waveguide arrays with tailored diffraction properties", *OSA Annual Meeting and Exhibit/Laser Science*, paper ThBB1, Orlando, Florida, September 29 - October 3, 2002.

[C19] Nikos K. Efremidis, Jared Hudock, and Demetrios N. Christodoulides, "Discrete temporal solitons along a chain of nonlinear coupled microcavities embedded in photonic crystals", paper ThBB2, *OSA Annual Meeting and Exhibit/Laser Science*, Orlando, Florida, September 29 - October 3, 2002.

[C18] Jared Hudock, Nikos K. Efremidis, and Demetrios N. Christodoulides, "Diffraction management and elliptic solitons in two-dimensional array lattices", paper ThBB5, *OSA Annual Meeting and Exhibit/Laser Science*, Orlando, Florida, September 29 - October 3, 2002.

[C17] Nikos K. Efremidis, Jared Hudock, Demetrios N. Christodoulides, Jason Fleischer, Suzanne Sears, and Mordechai Segev "Discrete solitons in photorefractive optically-induced photonic lattices", paper ThBB6, *OSA Annual Meeting and Exhibit/Laser Science*, Orlando, Florida, September 29 - October 3, 2002.

[C16] Jason W. Fleischer, T. Carmon, Mordechai Segev, Nikolaos K. Efremidis, and Demetrios N. Christodoulides, "Discrete solitons in optically-induced real-time waveguide arrays", paper NLTuA8, *Nonlinear Guided Waves and Their Applications*, Stresa, Italy, September 1-4, 2002.

[C15] Nikos K. Efremidis, Jared Hudock, and Demetrios N. Christodoulides, "Discrete temporal solitons along a chain of nonlinear coupled microcavities embedded in photonic crystals", paper NLWC2, *Nonlinear Guided Waves and Their Applications*, Stresa, Italy, September 1-4, 2002.

[C14] Nikos K. Efremidis, Jared Hudock, Demetrios N. Christodoulides, Jason Fleischer, Suzanne Sears, and Mordechai Segev "Discrete solitons in photorefractive optically-induced photonic lattices", paper NLTuA4, *Nonlinear Guided Waves and Their Applications*, Stresa, Italy, September 1-4, 2002.

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